

under the first will be found nineteen columns, and in the second, twenty-two columns, of terms employed in connection with steam-engines, railways, &c.

The volume consists of 320 closely-printed pages, and for reading French engineering and architectural works will be of great service.

Miscellaneous.

THE STREETS IN MANCHESTER.—Dear Mr. Editor,—Have you any influence with our "commissioners," who have put Manchester in a state of siege, and seem not disposed to raise it. The enemy will not evacuate the suburbs, and a formidable barricade of paving-stones and mud guards effectually the entrance to York-place. The consequence is a most unpleasant blinking of the eyes, occasioned by sympathetic action of the gas, and the most fashionable perfume in the Oxford-road, is one to which I and my neighbours have a strong aversion. A day or two ago we were left in total darkness, with not a candle to illumine our benighted state. Our only consolation was that which every Christian feels to be one,—namely, that our neighbours were suffering from the annoyance. These local disturbances are far more moving to our selfishness than the great political interests now involving discussion in London. You hear "dirt," "rain," "mud," "gas," "shameless commissioners," in everybody's mouth; and "Disraeli" and "Derby" are forgotten. Do mend our ways and lighten our darkness.—A YOUNG WIFE.

FORMATION OF THE ESSEX ARCHAEOLOGICAL SOCIETY.—A numerous and influential meeting assembled at Colchester on Tuesday in last week, for the purpose of establishing the proposed Essex Archaeological Society. Mr. Disney, as president elect, was to have taken the chair, but was prevented by indisposition. The Mayor of Colchester presided. A report was read by the Rev. E. L. Cutts, and appropriate resolutions were passed. The Disney professor of Archaeology at Cambridge, Rev. J. H. Marsden, then delivered an introductory lecture on archaeology, and Mr. J. Taylor gave some account of the antiquities found in his grounds. The formation of the society was afterwards celebrated by a dinner at the Cups Hotel, at which Mr. Disney seems to have presided.

NEW INVENTION FOR TRANSPLANTING TREES.—A machine for raising and transplanting trees has been exhibited at Cramond House, near Edinburgh. It is the invention of Mr. Stewart McGlashen, sculptor, Edinburgh. The first experiment was the raising of a plane or sycamore-tree, upwards of 50 feet high. An iron frame, about 9 feet square, being laid down, cutters or spades, 3 feet in depth and 1 in width, were driven into the ground in a slanting position, the space requiring six cutters on each side—iron rods being laid along the four rows of cutters, and extension rods being fixed across the frame to force the top of the cutters apart, making them converge more towards the bottom. An iron clasp of about 12 inches in breadth was next placed around the trunk of the tree, with a mat beneath it to preserve the bark—two strong parallel beams of wood being laid on each side of the trunk of the tree, about 6 feet from the ground, and supported on a frame placed on two carts for removal of the lifted tree. Chains were afterwards attached, and by means of four screws the whole mass was gradually raised to the surface—the screws being turned by four men standing on the top of the frame. In about half-an-hour after the whole cutters were driven in and the apparatus placed, the tree was raised about 1 foot out of the ground. The experiment is said to have been attended with entire success, and the efficiency of the invention was also illustrated in the successful application of smaller apparatus to the raising of shrubs, &c. In each case the plant was extracted with its native ball of earth. An oblong apparatus has also been invented by Mr. McGlashen for the removal of hedge-rows; and by a similar contrivance he lifts out the mass of earth for the

insertion of tile drains, replacing it when the work is accomplished. The implements used in these operations are also patented, and can be made of all sizes.

THE LIVERPOOL TIMBER TRADE.—A Liverpool monthly timber report says:—"Since 1st February the supplies of North American colonial wood have occupied a tonnage of 207,587: during same time last year, the tonnage was 206,494. The average amount for the like time in the four years previous was 190,787 tons. From the north of Europe, 16,375 tons, wood-laden, have arrived; whilst, for the like time last year, 22,466 tons arrived; the average of four years being 17,231 tons. The supply from Quebec, at close of present season, will prove at least equal to that of last year; but from St. John's it is expected that the amount of tonnage will fall considerably short. The demand, for consumption, of both timber and deals has, for some time past, been on a greatly extended scale, and with a continuance at the same rate during the winter months, it can scarcely be expected that prices have yet attained their maximum.

THE PIPE SEWER AT KILBURN.—Sir,—With reference to the report in the *Builder* of the discussion on the Drainage of Towns, at the Institution of Civil Engineers, containing Mr. Lovick's assertion regarding the failure of a pipe sewer at Kilburn, I request that you will have the fairness to state in your next number that the owner of the sewer gave a flat contradiction to Mr. Lovick's statement, and accounted for the failure by reason of the sewer pipes being too thin and brittle for the great pressure above them, and that it was not only the 10 feet mentioned by Mr. Lovick that failed, but the whole length of the 15-inch sewer, measuring above 1,000 feet.—GEORGE DUNCAN.

ITALIAN PALACES.—If they were arranged and kept up, indeed, with anything of English propriety, consistency, order, or cleanliness, many of them would be noble habitations; but, in the heat of them, you see a barrenness, a neglect, an all-prevailing look of misery,—deficiencies everywhere, and contemptible meanness adhering to grasping magnificence. But nothing is so offensive as the dirt. Among all the palaces there is no such thing as a palace of cleanliness. You see (and that is not the worst), you smell abominable dunghills, heaped up against the walls of splendid palaces, and foul heaps of ordure and rubbish defiling their columned courts. You ascend noble marble staircases, whose costly materials are invisible beneath the accumulated filth that covers them; and you are sickened with the noxious odours that assail you at every turn. You pass through long suites of ghastly rooms, with a few crazy old tables and chairs thinly scattered through them, and behold around you nothing but gloom and discomfort. The custom of abandoning the ground-floor for menial purposes, except when used for shops—which is almost universal throughout Italy,—and covering its windows, both for security and economy, with a strong iron grate without glass behind it, contributes to give the houses and palaces a wretched and dungeon-like appearance. It is no uncommon thing for an Italian nobleman to go up into the attic of his own palace himself, and to let the principal rooms to lodgers. Proud as he is, he thinks this no degradation; though he would spurn the idea of allowing his sons to follow any profession, save that of arms or of the church. He would sooner see them dependants, flatterers, eaves-droppers, spies, gamblers, *cavalieri serrenti*, polite rogues of any kind, or even beggars, than honest merchants, lawyers, or physicians.

—*Rome in the Nineteenth Century.*

NEW SUBMARINE TELEGRAPH LINE.—A new cable has been patented by Messrs. C. W. and J. J. Harrison, telegraphic engineers. The encircling wires are done away with, and strips of galvanized iron of a wedge form are employed instead. These are to encircle the gutta-percha covered wire with a complete covering, presenting the appearance of an entire, yet perfectly flexible, tube. Interiorly the gutta-percha is further protected by "an imperishable composition, which no insect will attack."

IRONSTONE SLAG BRICKS.—By adopting Elliott's new process for manufacturing bricks, pipes, tiles, pottery, &c. from ironstone, says a correspondent of the *Mechanics' Magazine*, iron may be manufactured on a small scale to great advantage, by using the slag when in a fluid state running from the furnace, instead of throwing it away, as is customary, at an enormous expense of labour and waste of land. The coals and other materials being necessarily used for producing iron will, of course, be charged to that account, and the labour and other expenses saved by removing the hot slag, will nearly, if not quite, pay all the labour of moulding the slag into bricks, &c. The colour of the bricks will be light brown: they may be made either rough, smooth, hollow, plain, or ornamental, and in any form or shape, requiring no plastering, and when used for building may be papered or painted as soon as covered, in any season of the year. Where ironstone is not found, chalk, limestone, marl, loam, breeze, small coal, oyster shells, &c. may be melted very rapidly, in a reverberatory furnace with a heating stove attached, so that the material may be nearly melted by the waste heat before it goes into the melting hearth.

EXTENSION OF FARRINGTON-STREET.—The Improvements Committee of Common Council have, it appears, already expended nearly half the money at their disposal in the purchase of sites along the whole line, and they are actively in treaty with other parties in order to have the street opened as soon as possible.

GAS.—A portable gas apparatus or gas lantern is thus described by a Kelson paper, as having been invented by Mr. John McDougall, a cabinet-maker there:—"The gasometer is contained within a receptacle or lantern, in which is placed a small lamp with an inextinguishable wick, for the purpose of heating the vessel containing carbonate of lime and materials for producing the gas, which is conveyed to the burner by a small tube."—The rapid extension of Brentwood has rendered it necessary to erect new and enlarged gasworks, on a plan whereby 6,000,000 cubic feet of gas will be available for the supply of the town, the new lunatic asylum for the county, &c. The premium offered by the company for designs was contested for by five competitors, and was adjudged to those of Mr. Church, engineer to the Chelmsford Gas Company, under whom they are to be carried out. The same engineer is also engaged in the re-erection of enlarged works at Braintree.

NEW MODE OF APPLYING DRIVING-BANDS.—At a recent meeting of the Liverpool Philosophical Society, as reported by the *Albion*, Mr. Dudley, from America, exhibited an improved mode of applying the power of driving-bands to machinery, the invention of Mr. Parker, a house-carpenter. He produced a model of the machine, with one of which size, he said, with a stout man to turn and a boy to feed, more sawing could be accomplished, of the character generally done in a joiner's shop, than any eight men can do by the present mode of operation. The machine was also equally applicable to all kinds of machinery that required rotary motion, as it was to the saw.

SAFETY ON RAILWAYS.—Mr. H. Brown, M.P. has given notice that he intends shortly to bring before the House of Commons the subject of the safety of the public on railways.

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"Books and Addresses."—We have not time to point out books or find addresses.

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